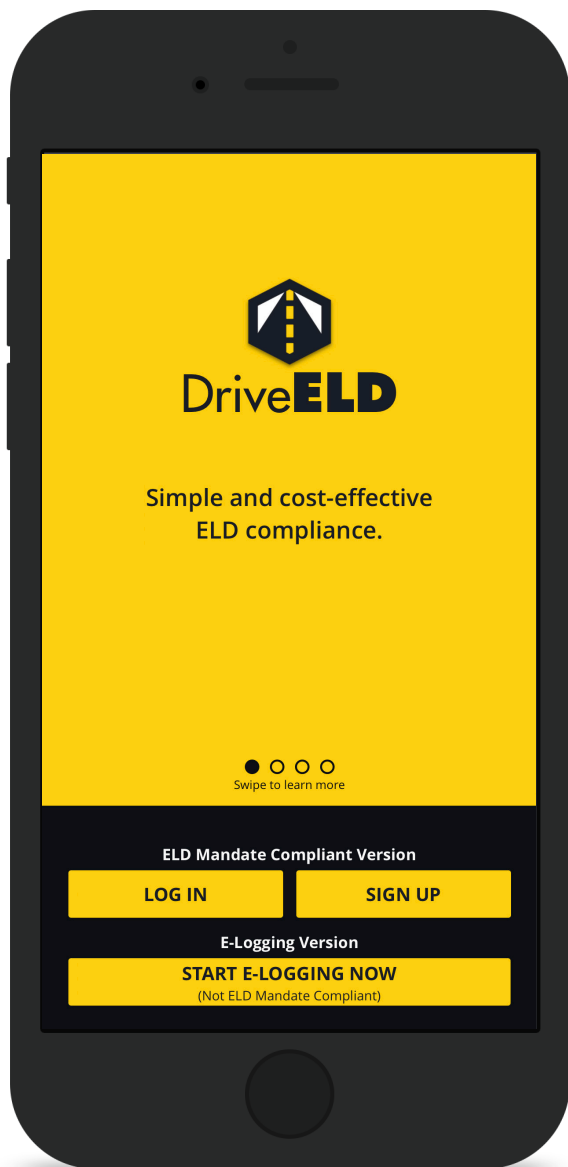


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**User Manual**



## VERSION HISTORY

# 02

## INTRODUCTION

# 03

## GETTING STARTED

# 04

## OPERATION

# 12

## MALFUNCTIONS

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# VERSION HISTORY

Version	Date
1.0.0	11/21/17
1.0.1	11/30/2017



This manual provides DriveELD's device and mobile application installation and operation instructions.

Our mission is to create the best ELD user experience, reduce costs, and improve safety. DriveELD was created to provide easy-to-use, low cost solutions for compliance with electronic logging regulations. The DriveELD team has been developing in-vehicle telematics hardware and software solutions for over a decade. But even with all of our experience we need you on our team. Please let us know if there is anything we can do to improve our products or services. If you have any questions or needs please contact us. We're here to help.



# GETTING STARTED



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866.623.7483  
[www.drive-eld.com](http://www.drive-eld.com)  
[contact@drive-eld.com](mailto:contact@drive-eld.com)

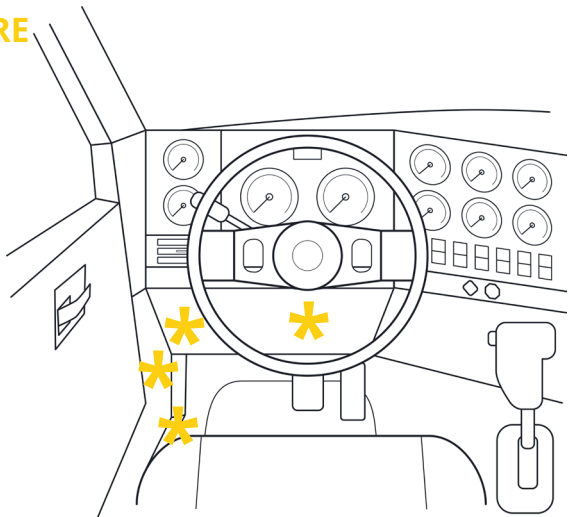
**GETTING STARTED**

**04**

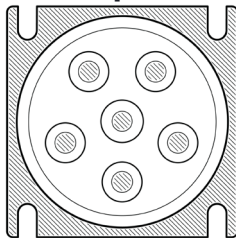
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## CONNECT HARDWARE

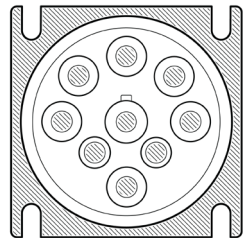
- Locate your diagnostic port in your vehicle while the engine is turned off. We have starred four common locations.
- Connect the DriveELD cable to your diagnostic port. Your vehicle diagnostic port is represented by one of the three images below:
  - 6-pin
  - 9-pin
  - OBDII
- If an adapter is required, please follow the same steps after connecting the adapter to the device's cable.



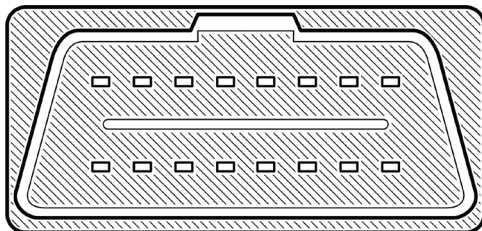
**6-pin**



**9-pin**



**OBDII**



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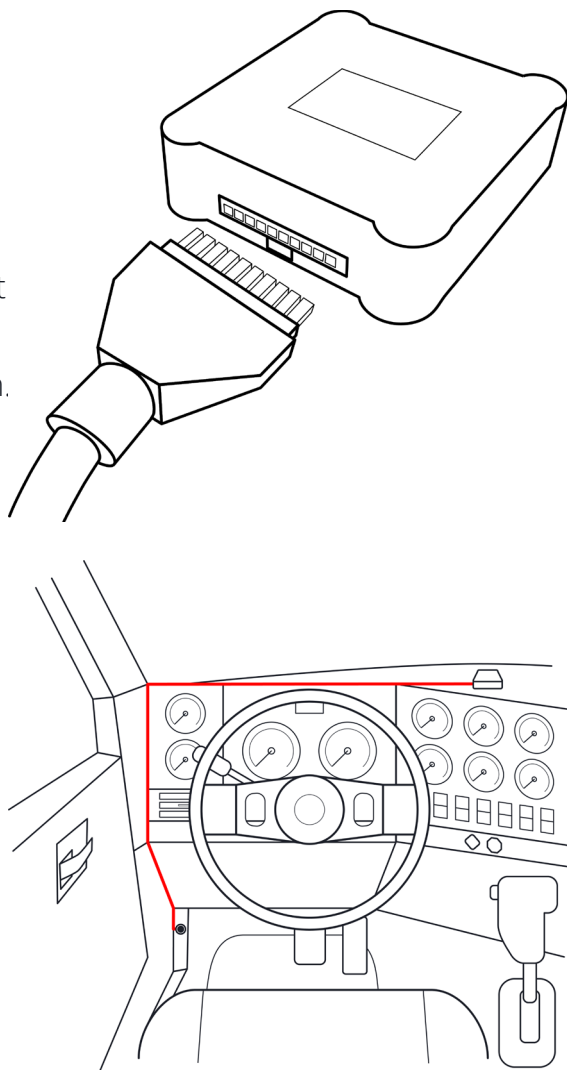
**GETTING STARTED**

**05**

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## CONNECT HARDWARE CONT.

- Attach the free end of the cable to the DriveELD device.
- Position the device so that it does not impact your driving abilities or restrict your movement
- The device does not need to be on the dash.
- Caution: Device must be positioned to not interfere with the driver's use of the pedals.



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**06**

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## CONNECT HARDWARE CONT.

- Once you have plugged the device in, you will see the following indicator lights displayed:

### Red LED

LED State	
Off	GPS power management engaged. GPS is turned off, GPS backup clock is ON.
Blinking	GPS is in acquisition mode.
On	GPS signal is locked.

### Green LED

LED State	
Off	Device not plugged in.
Short Blink	Device is powered, vehicle not detected.
Fast Blink	Vehicle activity detected, device is registering.
On	Device is registered on the vehicle.

Note: You may need to look closely to see the actual LED through the window. For power management reasons, sometimes the LEDs will not stay on.

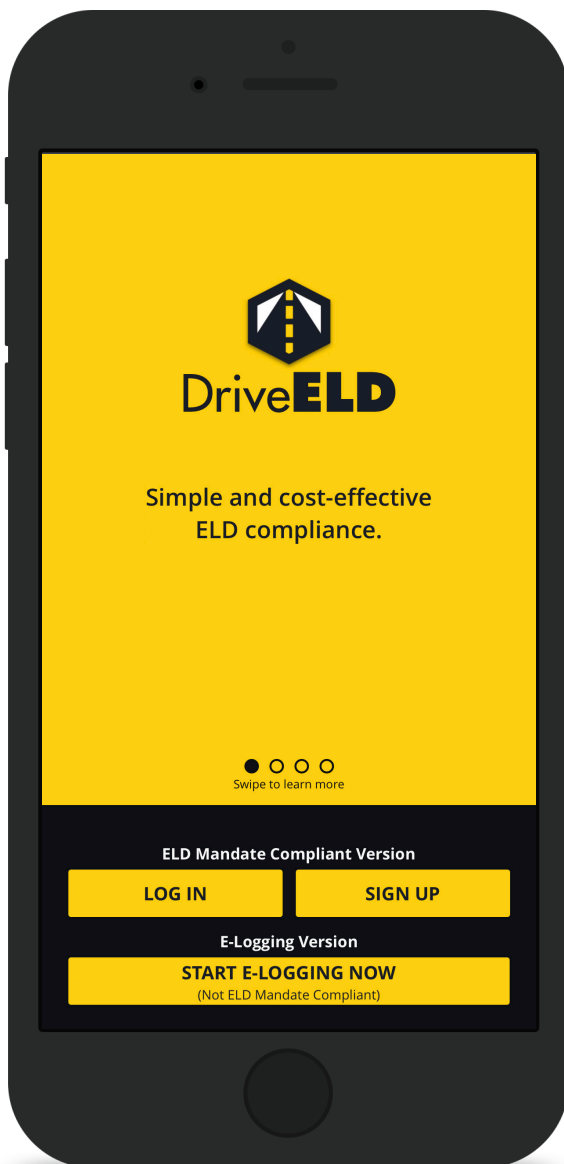


## DOWNLOAD APP

- Download the free Drive-ELD app from the iTunes App Store or the Google Play Store.

## SIGN UP

- Select the Sign Up button.
- Enter your email address and a password to create an account.
- Once you have an account you can see which carriers have approved your email address.



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**GETTING STARTED**

**08**

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## ADD DRIVER INFORMATION

- Here you add your driver information.
- You can return to this section at any point to change or add information.

**ADD DRIVER INFORMATION**

CANCEL CONTINUE

If you are missing any information, don't worry because you can add it later.

First Name

Last Name

Select Your CDL State

License Number

Driver Phone Number

ADD PROFILE PICTURE

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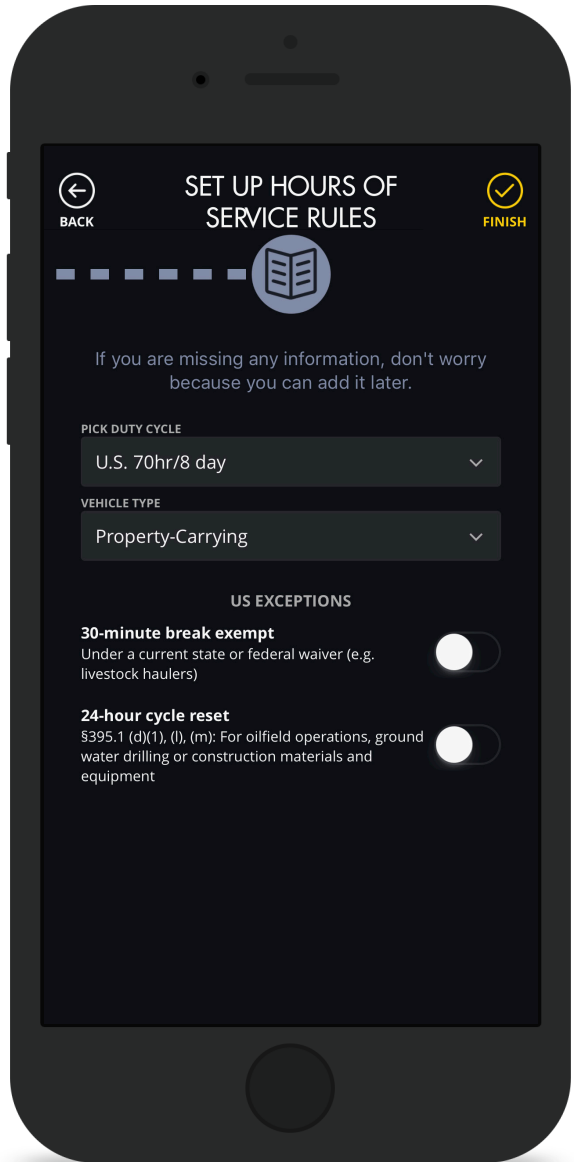
**GETTING STARTED**

**09**

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## SET UP HOURS OF SERVICE RULES

- Pick your duty cycle and vehicle type so the app can customize the service rules to you.
- Select United States exemptions that apply to your situation if needed.
- Return to this section at any point to change or add information.



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**10**

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## SET UP HOURS OF SERVICE RULES CONT.

- Note: These settings only change warnings displayed in the app. Drivers are responsible for their own compliance as the ELD mandate does NOT automatically communicate 30 minutes break exceptions or 24 hour resets to officials.
- If you are completely exempt from record of duty status, the fleet must set this up for you.

← BACK SET UP HOURS OF SERVICE RULES ✓ FINISH

■ ■ ■ ■ ■

If you are missing any information, don't worry because you can add it later.

PICK DUTY CYCLE  
U.S. 70hr/8 day

VEHICLE TYPE  
Property-Carrying

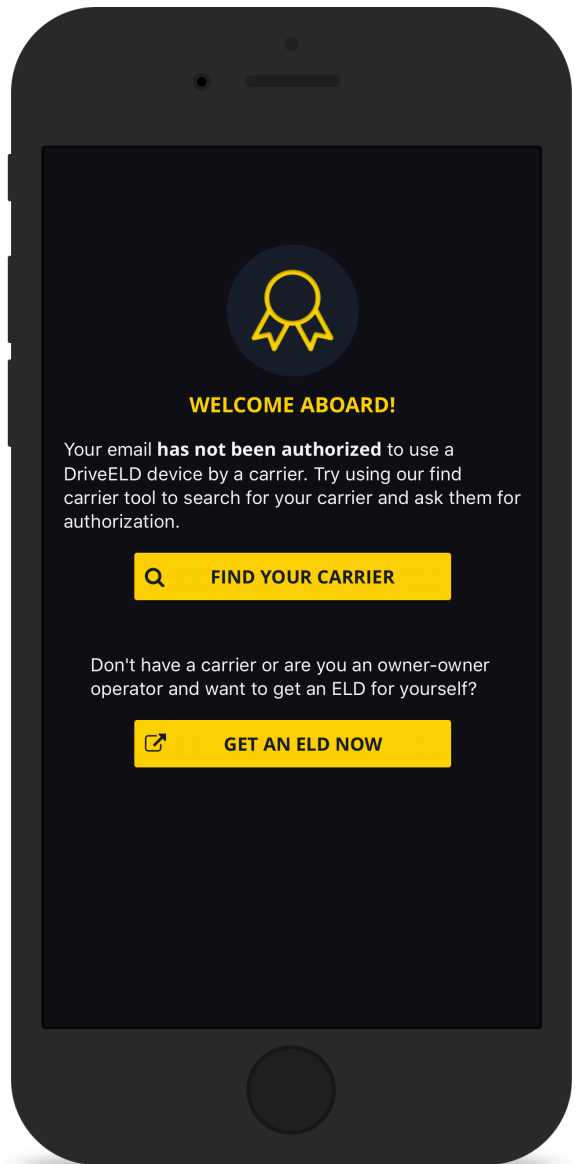
US EXCEPTIONS

**30-minute break exempt**  
Under a current state or federal waiver (e.g. livestock haulers)

**24-hour cycle reset**  
§395.1 (d)(1), (l), (m): For oilfield operations, ground water drilling or construction materials and equipment

## CONNECT TO A CARRIER

- Once you have an account you can see which carriers have approved your email address.
- You can also search for a carrier and request approval.
- If you do not have a carrier or are an owner operator select the Get an ELD Now button.
- Your carrier will confirm their fleet name, DOT number, and verify they have accepted your request.
- Your account can only be linked to one carrier.



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**GETTING STARTED**

**12**

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# OPERATION



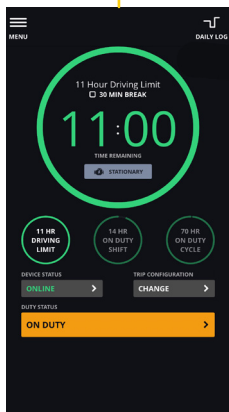
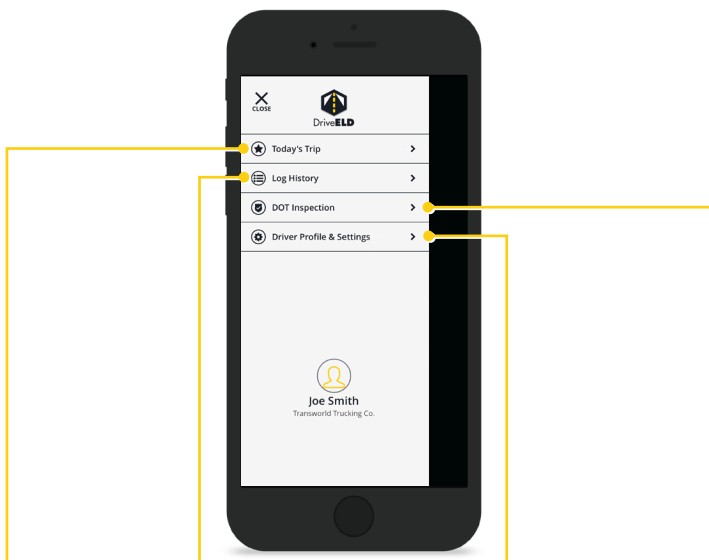
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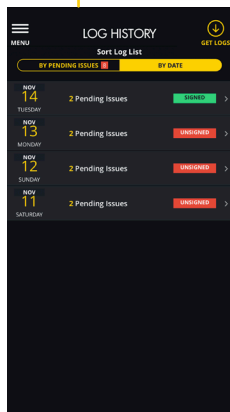
**OPERATION**

**13**

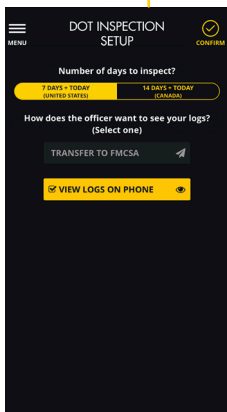
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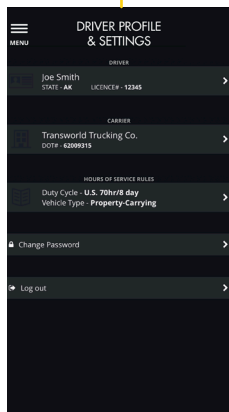
**TODAY'S TRIP**  
View your daily information, connect your ELD, and change your duty status.



**LOG HISTORY**  
View, edit, certify, or add information to your past logs.



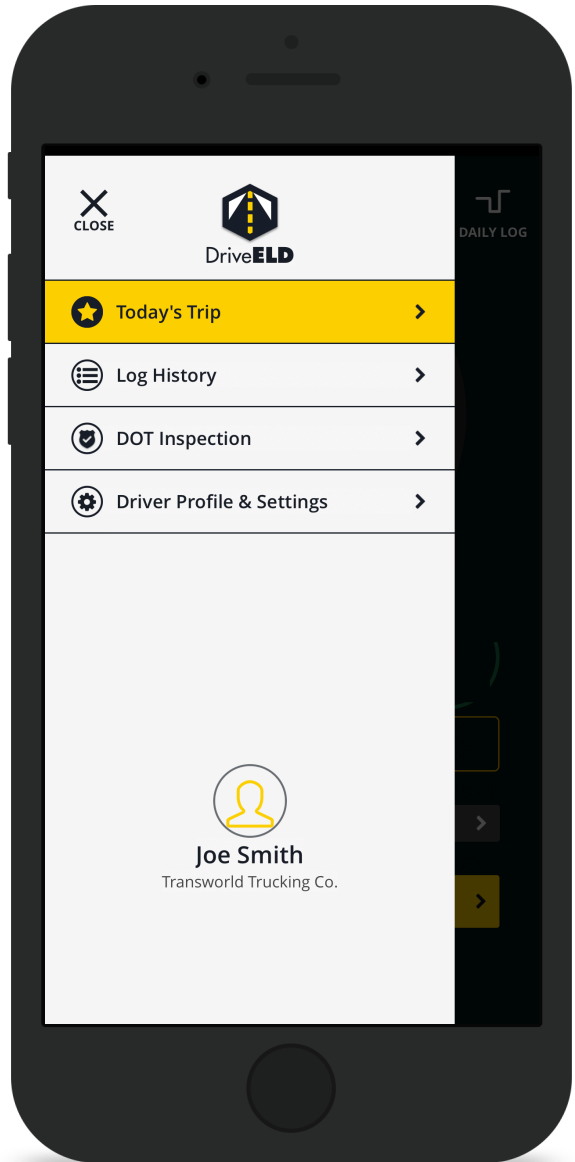
**DOT INSPECTION**  
Send or display your logs for an officer.



**DRIVER PROFILE & SETTINGS**  
Edit your driver profile settings throughout your trip.

## TODAY'S TRIP OVERVIEW

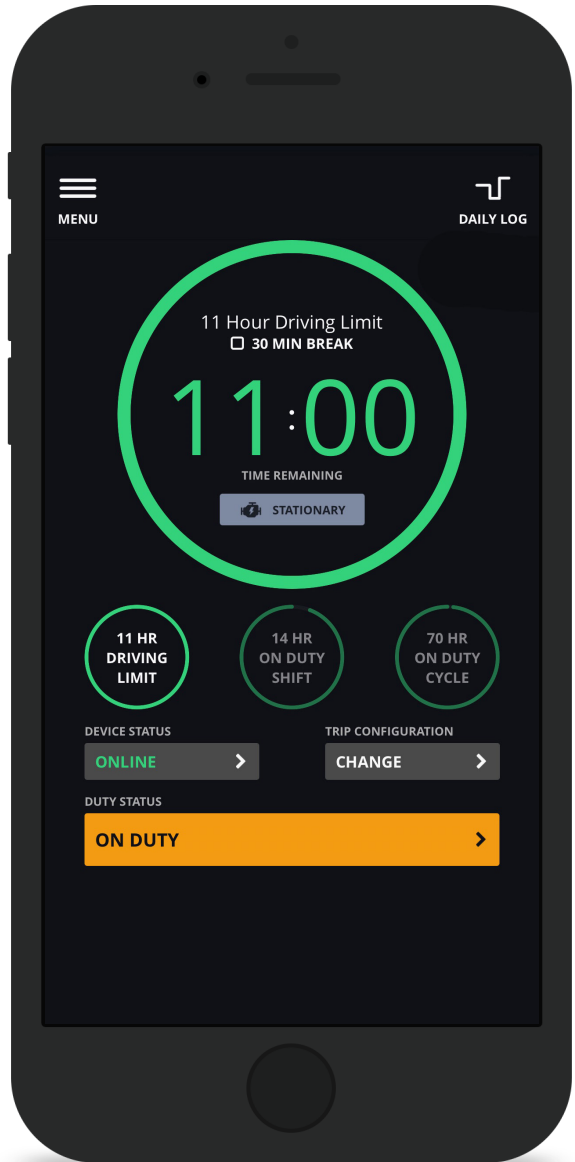
- View device status.
- Edit trip configurations.
- Change duty status.
- View or edit daily log.





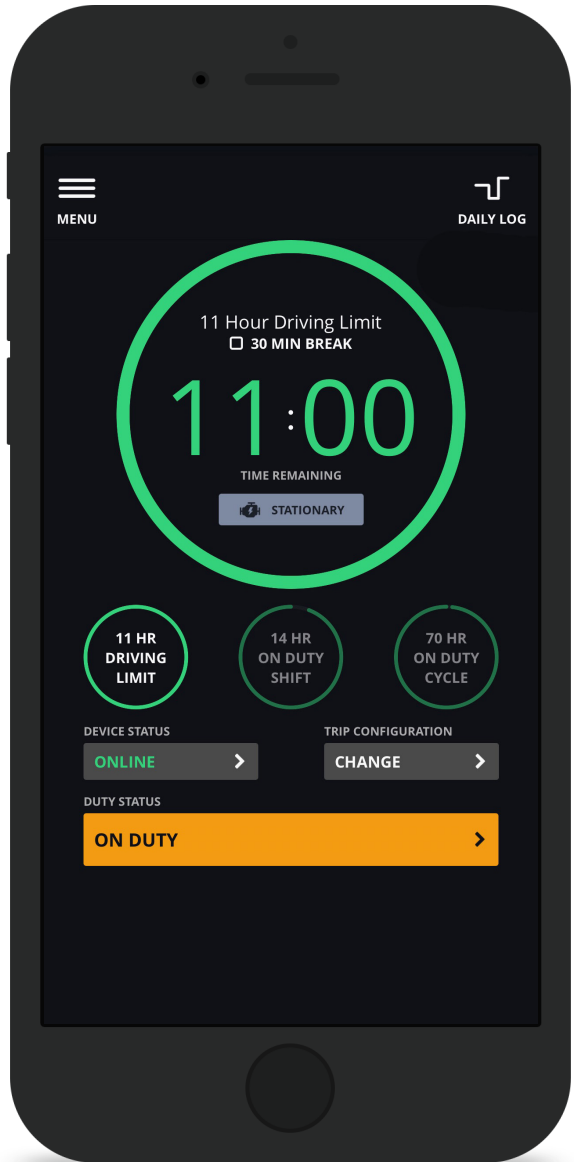
## TODAY'S TRIP

- From Today's Trip you can return to the main menu with the Menu button in the upper left or see the Daily Log page in more detail with the Daily Log button in the upper right.
- The time displayed at the top shows your total driving limit and the time you have remaining in that limit.
- Under your 11 hr driving limit clock, you will see your 14 hr on duty breakdown and your 70 hr on duty cycle.



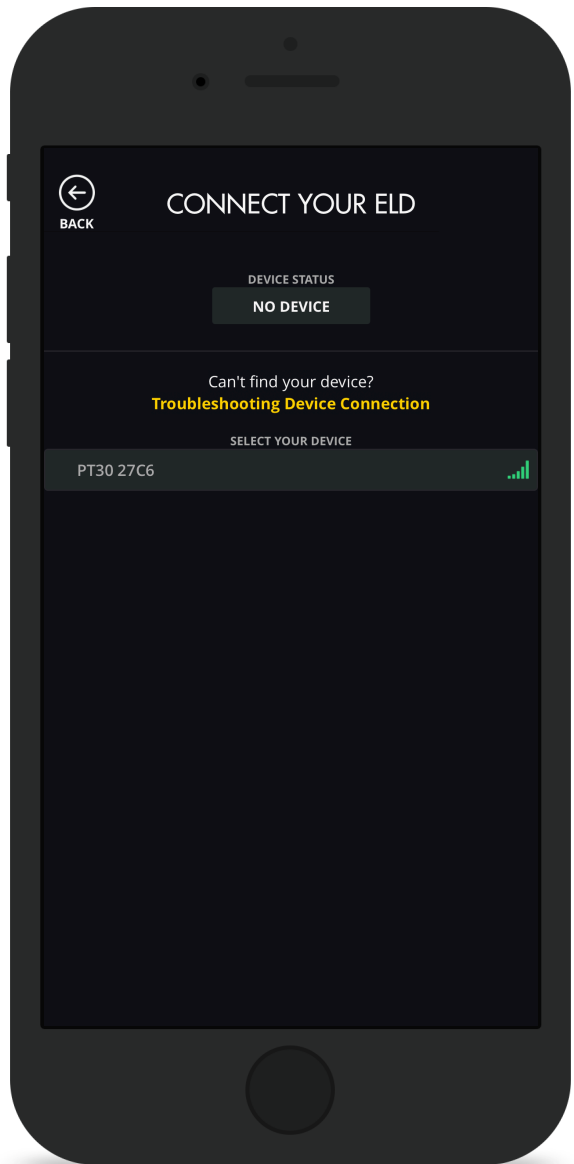
## TODAY'S TRIP CONT.

- Review your Trip Configuration throughout your trip to ensure that Co-Driver and shipment information are accurate.
- If your device is not already paired select the Device Status button.
- To change your duty status select the Duty Status button.



## PAIR YOUR ELD

- Make sure Bluetooth is enabled on your phone.
- Select your device from the device list.
- You may occasionally be asked to update your firmware on this screen.



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**OPERATION**

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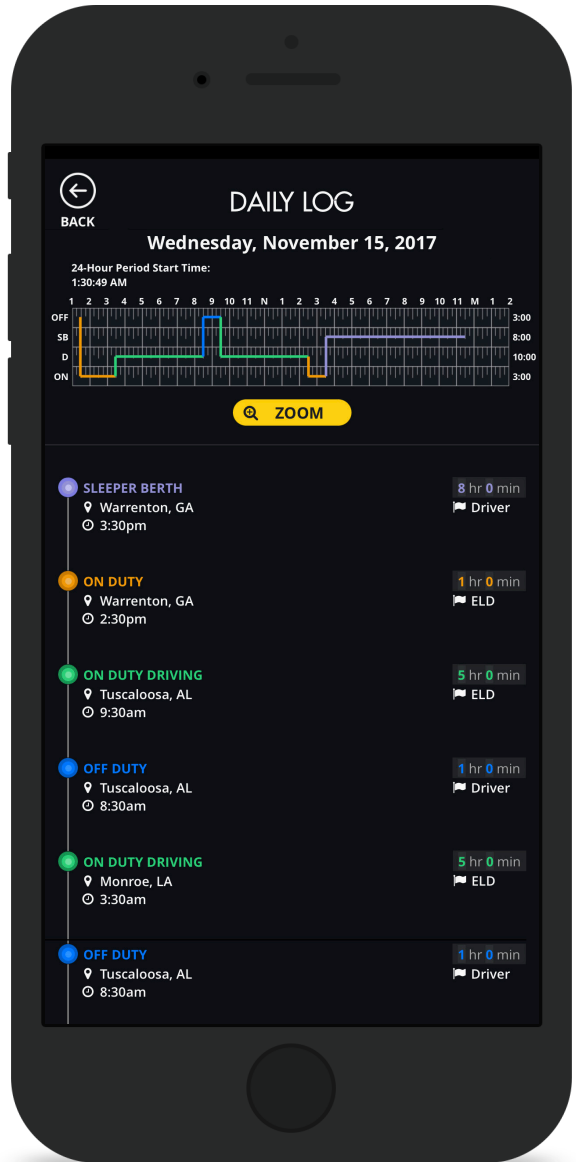
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# DAILY LOG

- By selecting an event in your daily log, you will be taken to the Change Past Duty Event screen where you can edit, add, or replace events.

## Daily Log Key

Color	Meaning
Green	On Duty - Driving
Orange	On Duty - Not Driving
Blue	Off Duty
Purple	Sleeper Berth



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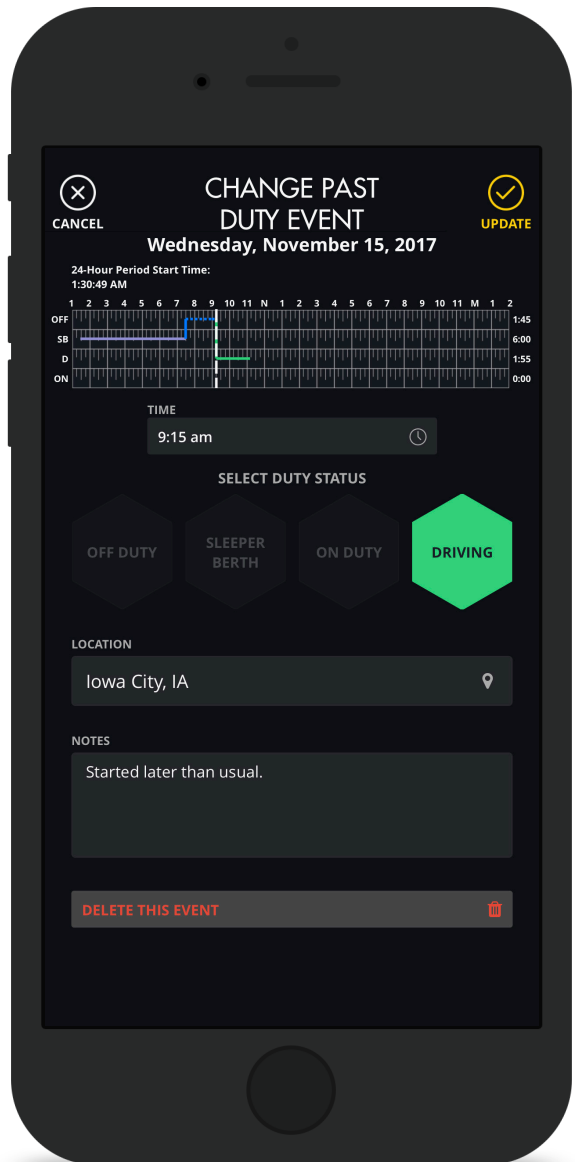
OPERATION

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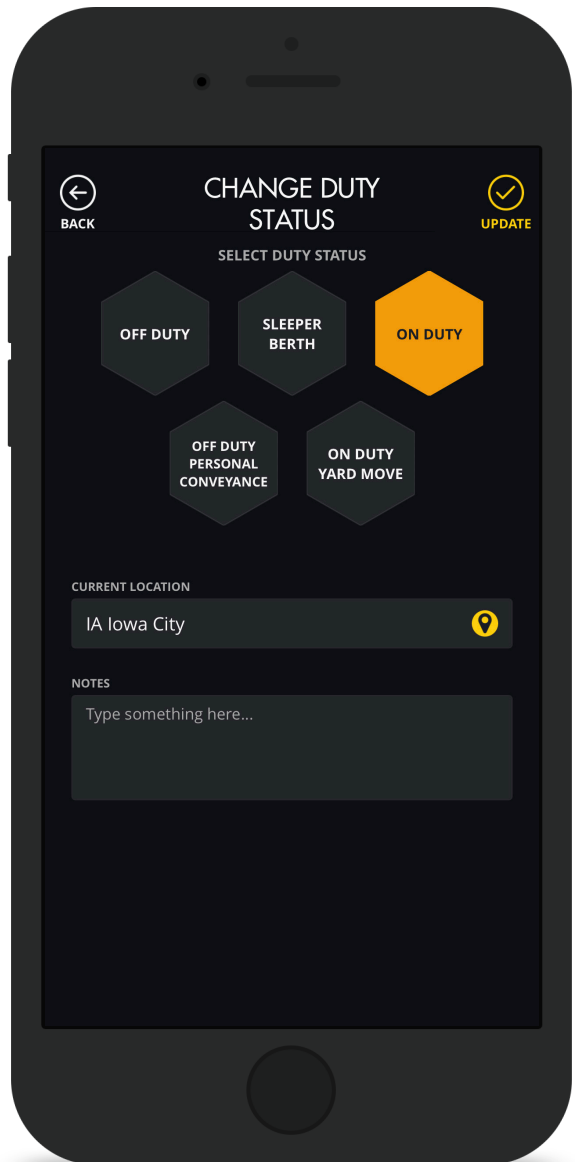
## CHANGE PAST DUTY EVENT

- When changing a past duty event first change your start time if needed.
- Then you can change or enter a location.
- At the bottom there is a place for you to add notes to remember why you changed this event. All the edits require an annotation.
- Next change your duty status if needed.
- If you would like to delete this event entirely select the Delete this Event button.



## CHANGE DUTY STATUS

- Select your Duty Status by tapping one of the five options.
  - Note: Personal Conveyance and Yard Move are only available if allowed by carrier.
- Tap the Current Location button to record and add your location to your log.
- This field is required. If the app is not given location permission you will have to type in your location.



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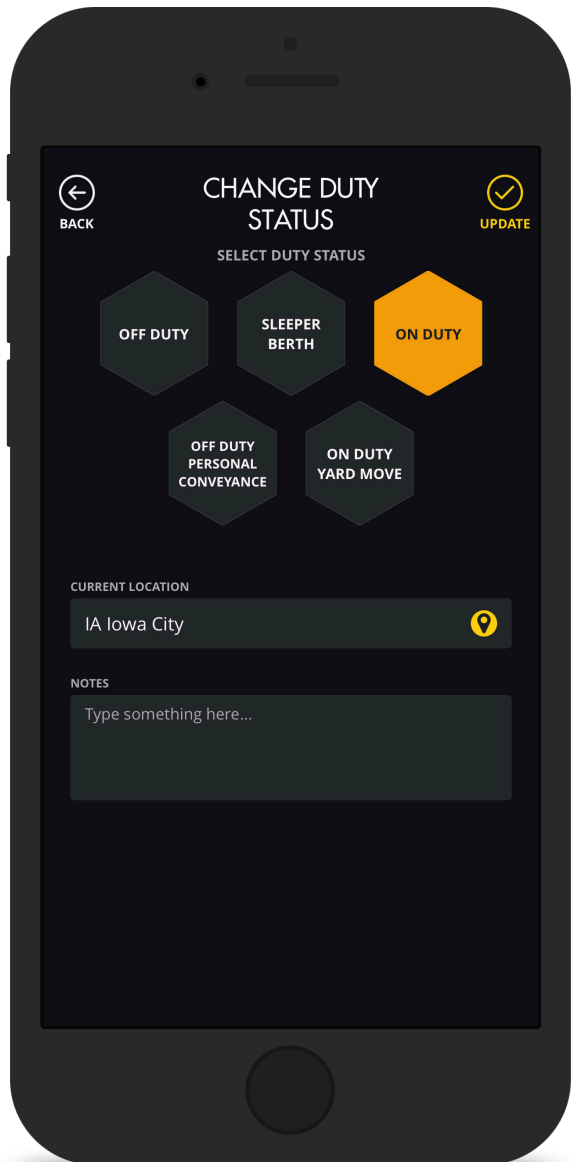
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**OPERATION**  
**21**

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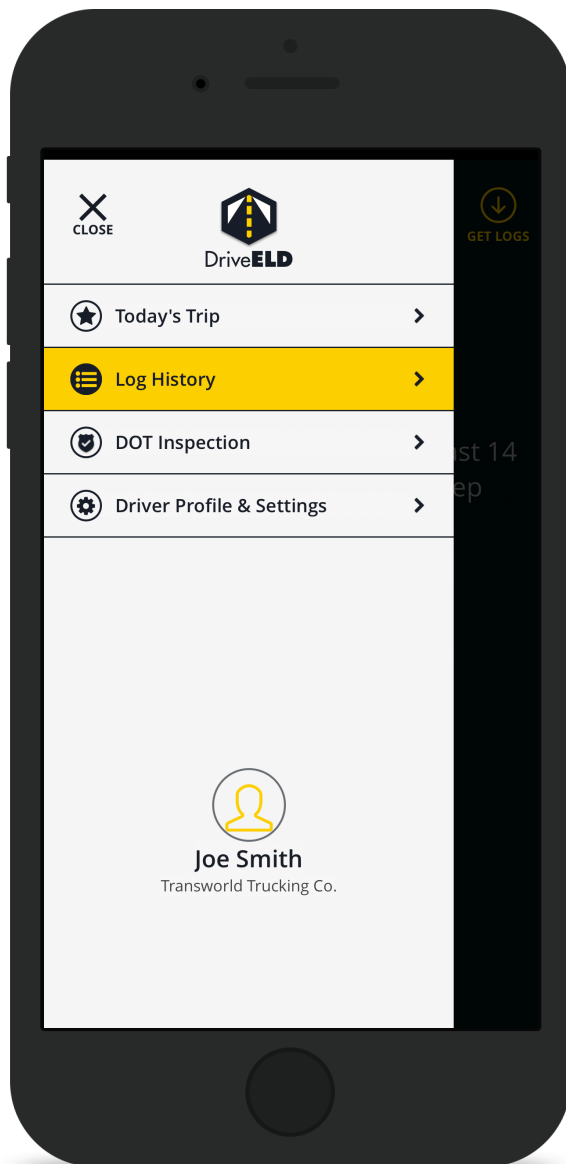
## CHANGE DUTY STATUS CONT.

- Tap Notes if there is anything you would like to record or add to your log.
- Notes will show up as an annotation in your logs. Certain duty status changes require annotations.
- Once you have completed your Duty Status Change, select the Update button in the upper right corner.



## LOG HISTORY OVERVIEW

- Review past logs.
- Edit or change past logs.
- Sign logs.
- Edit trip configurations.
- Accept or reject unidentified driving records and motor carrier edits.



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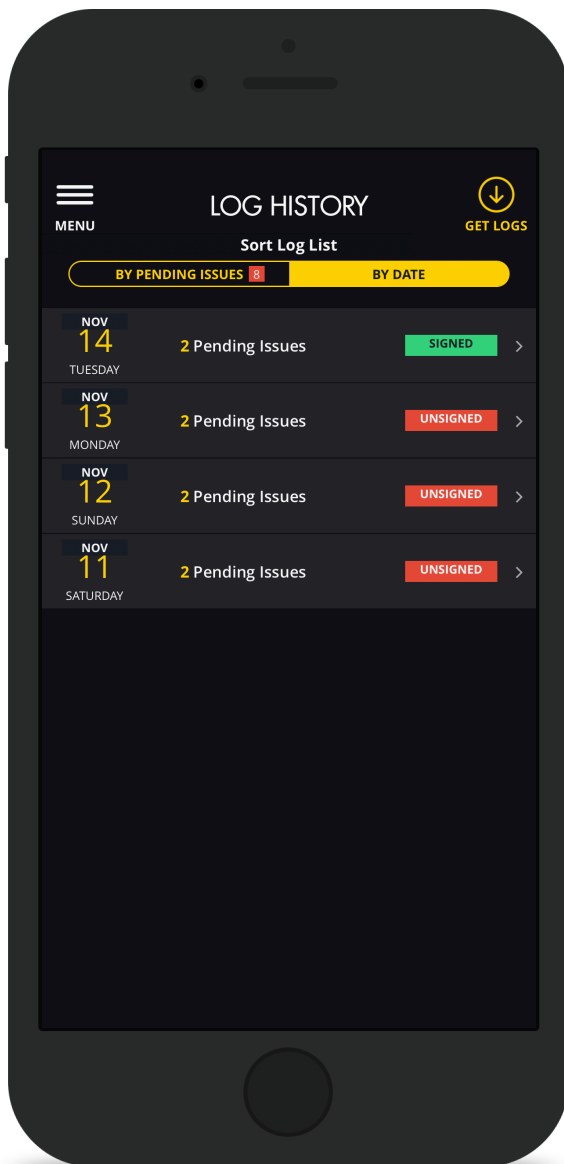
**OPERATION**  
**23**

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## LOG HISTORY

- From the Log History screen you can return to the menu with the Menu button in the upper left or download your logs with the Get Logs button in the upper right.
- All your past logs are displayed showing their date, number of pending issues, and if they are signed or not.
- You can sort this list by pending issues or by date.
- To sign a log or see more details select a log from the list.



**DriveELD**

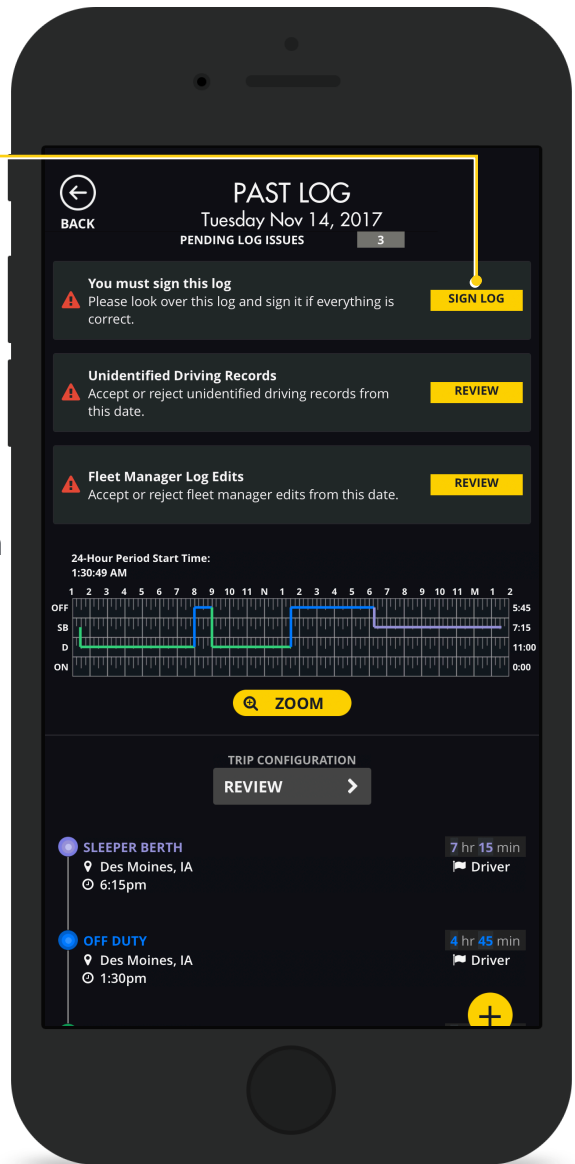
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**OPERATION**  
**24**

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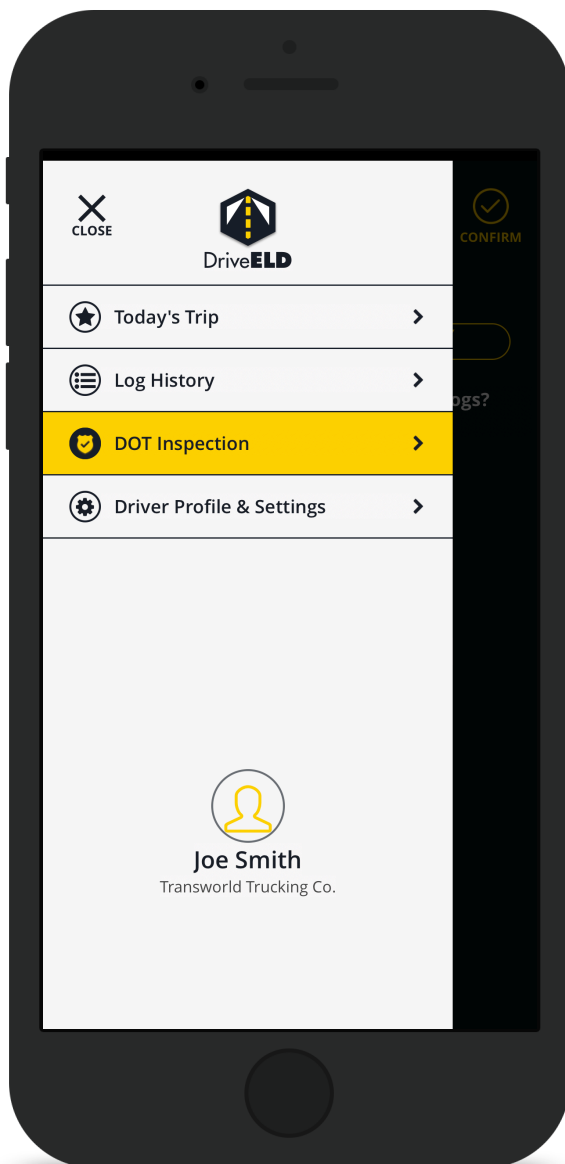
## Past Log

- A Sign Log button will appear in the header if a past log has not been signed.
- All pending issues are reviewable through their Review buttons at the top of the Past Log.
- Below pending issues you will find a color coded traditional graph with your event details displayed along with a breakdown for that past log.



## DOT INSPECTION OVERVIEW

- Transfer logs to the FMCSA through web services or email.
- Show logs to an officer.



**DriveELD**

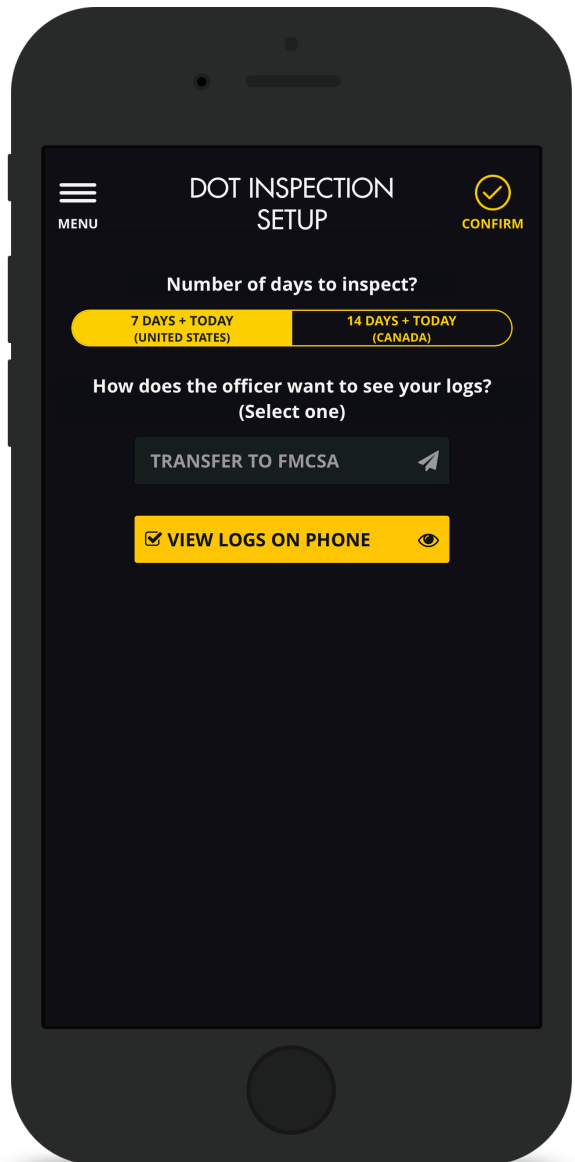
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**OPERATION**  
**26**

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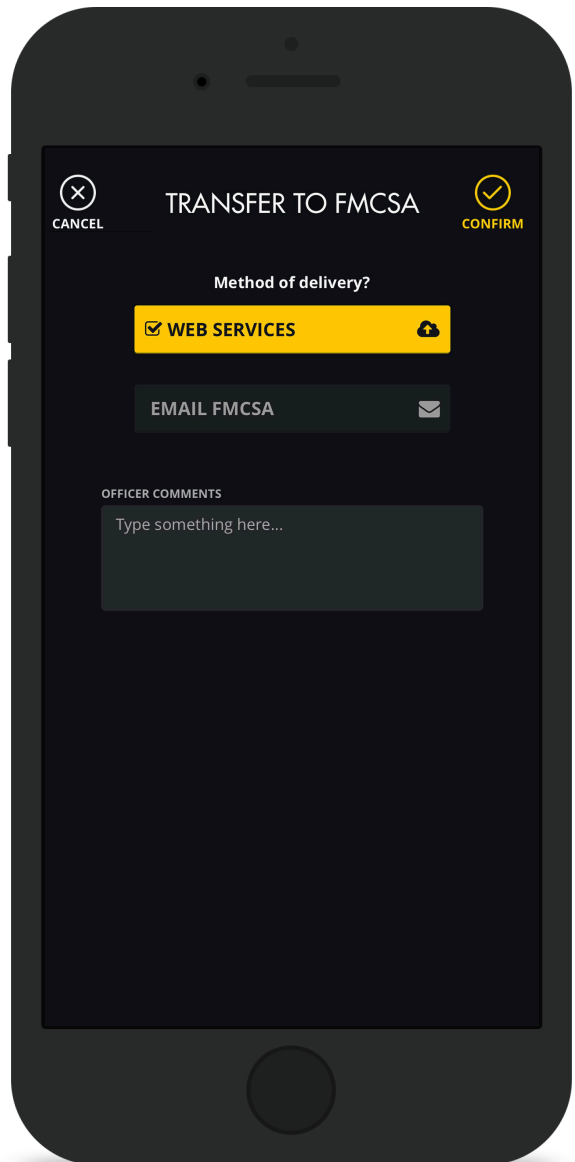
## DOT INSPECTION SETUP

- Once you select DOT Inspection from the main menu, tap the View Logs on Phone button and then the Confirm button in the top right corner to show your past log history to an officer.
- After confirming to view logs on phone, you will be prompted to hand your phone to the officer to begin the inspection.
- If Drivers need to email or print these logs, there is a Share button provided.



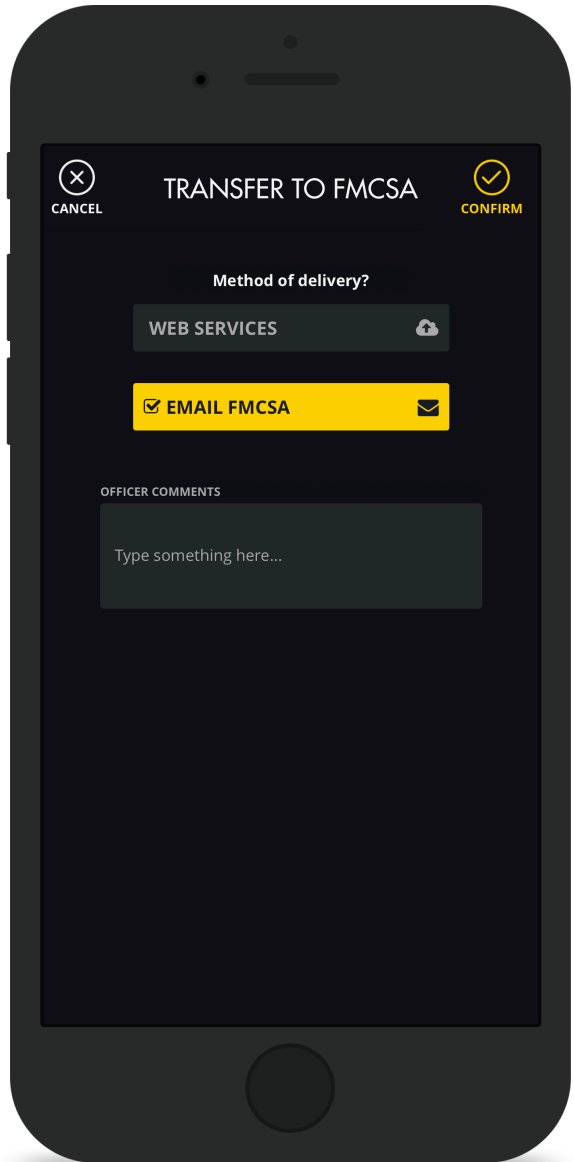
## TRANSFER TO FMCSA

- Web services is the certified transfer mechanism setup by the FMCSA. All transfers require an internet connection.
- The transfer is handled by DriveELD software. Drivers will not use personal email accounts.
- If directed by the enforcement official add an officer comment. This may be called an Output File Comment.
- The officer should instruct you on whether to send your logs via the web or email.



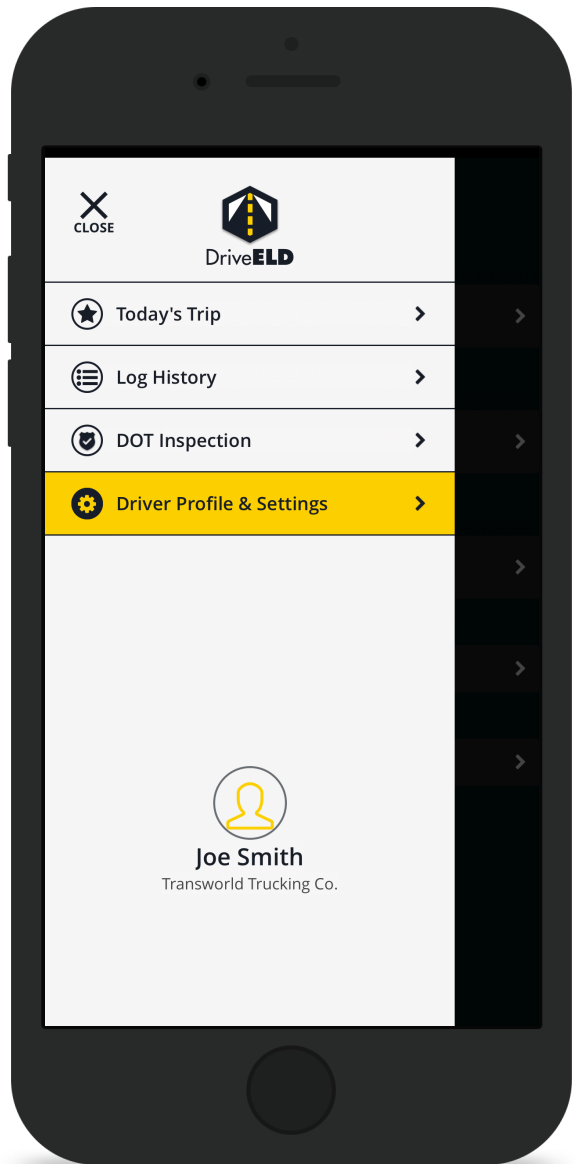
## TRANSFER TO FMCSA CONT.

- If the officer would like to be emailed the logs select the Email FMCSA button and then the Confirm button in the top right corner.
- You will be given a page to add email addresses to send the logs to.



## DRIVER PROFILE & SETTINGS OVERVIEW

- Edit driver settings.
- Edit carrier settings.
- Change hours of service rules.
- Change password.



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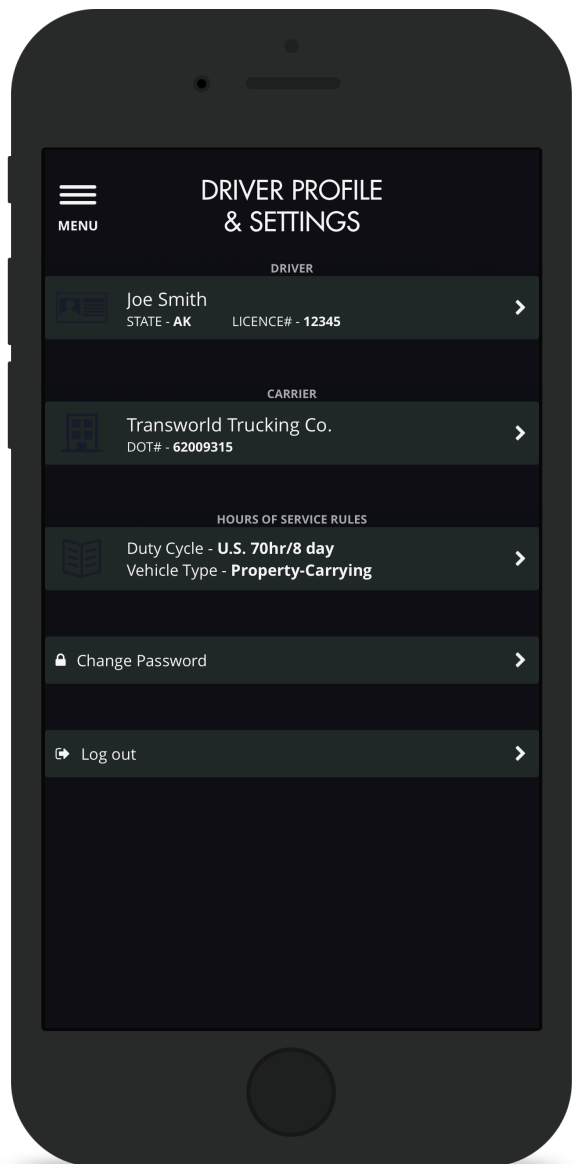
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**OPERATION**  
**30**

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## EDITING DRIVER SETTING

- You can access and edit your driver, carrier, and hours of service rules by selecting one of the three settings.
- Once you have selected one of the three options you are able to add and/or edit information.
- Only certain information is editable. Contact your carrier if you spot an issue in a field you cannot edit.







# MALFUNCTIONS



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**MALFUNCTIONS**

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# MALFUNCTIONS & DATA DIAGNOSTIC EVENTS

- When a data diagnostic event or an ELD malfunction is detected, the ELD will record the event.
- The recorded data diagnostic events or malfunctions are discrepancies found while running the application/hardware, and are recorded to maintain compliance with the FMCSA.

# MALFUNCTIONS EVENTS

Requirement #	Event Code	Event Name	Description
4.6.1.1	P	Power Compliance Malfunction	An ELD must set a power compliance malfunction if the power data diagnostics event described in paragraph 4.6.1.1(a) of this appendix indicates an aggregated in-motion driving time understatement of 30 minutes or more on the ELD over a 24-hour period across all driver profiles, including the unidentified driver profile.
4.6.1.2	E	Engine Synchronization Compliance Malfunction	An ELD must set an engine synchronization compliance malfunction if connectivity to any of the required data sources specified in section 4.3.1 of this appendix is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles, including the unidentified driver profile.
4.6.1.3	T	Timing Compliance Malfunction	The ELD must periodically cross-check its compliance with the requirement specified in section 4.3.1.5 of this appendix with respect to an accurate external UTC source and must record a timing compliance malfunction when it can no longer meet the underlying compliance requirement.
4.6.1.4	L	Position Compliance Malfunction	ELD records requiring location information must use the last valid position measurement and include the latitude/longitude coordinates and distance traveled, in miles, since the last valid position measurement. An ELD must monitor elapsed time during periods when the ELD fails to acquire a valid position measurement within 5 miles of the CMV's movement. When such elapsed time exceeds a cumulative 60 minutes over a 24 hour period, the ELD must set and record a positioning compliance malfunction.

# MALFUNCTIONS EVENTS CONT.

Requirement #	Event Code	Event Name	Description
4.6.1.5	R	Data Recording Compliance Malfunction	An ELD must monitor its storage capacity and integrity and must detect a data recording compliance malfunction if it can no longer record or retain required events or retrieve recorded logs that are not otherwise catalogued remotely by the motor carrier.
4.6.1.7	S	Data Transfer Compliance Malfunction	<p>(a) An ELD must implement in-service monitoring functions to verify that the data transfer mechanism(s) described in section 4.9.1 of this appendix are continuing to function properly. An ELD must verify this functionality at least once every 7 days. These monitoring functions may be automatic or may involve manual steps for a driver.</p> <p>(b) If the monitoring mechanism fails to confirm proper in-service operation of the data transfer mechanism(s), an ELD must record a data transfer data diagnostic event and enter an unconfirmed data transfer mode.</p> <p>(c) After an ELD records a data transfer data diagnostic event, the ELD must increase the frequency of the monitoring function to check at least once every 24-hour period. If the ELD stays in the unconfirmed data transfer mode following the next three consecutive monitoring checks, the ELD must detect a data transfer compliance malfunction.</p>

# DATA DIAGNOSTIC EVENTS

Requirement #	Event Code	Event Name	Description
4.6.1.1	1	Power Data Diagnostic Event	An ELD must monitor data it receives from the engine ECM or alternative sources as allowed in sections 4.3.1.1-4.3.1.4 of this appendix, its onboard sensors, and data record history to identify instances when it may not have complied with the power requirements specified in section 4.3.1.1, in which case, the ELD must record a power data diagnostics event for the corresponding driver(s), or under the unidentified driver profile if no drivers were authenticated at the time of detection.
4.6.1.2	2	Engine Synchronization Data Diagnostic Event	An ELD required to establish a link to the engine ECM as described in section 4.2 must monitor its connectivity to the engine ECM and its ability to retrieve the vehicle parameters described under section 4.3.1 of this appendix and must record an engine-synchronization data diagnostics event when it no longer can acquire updated values for the ELD parameters required for records within 5 seconds of the need.
4.6.1.4 (d)	3	Missing Data Elements Data Diagnostic Event	If a new ELD event must be recorded at an instance when the ELD had failed to acquire a valid position measurement within the most recent elapsed 5 miles of driving, but the ELD has not yet set a positioning compliance malfunction, the ELD must record the character "X" in both the latitude and longitude fields, unless location is entered manually by the driver, in which case it must log the character "M" instead. Under the circumstances listed in this paragraph, if the ELD event is due to a change in duty status for the driver, the ELD must prompt the driver to enter location manually in accordance with section 4.3.2.7 of this appendix. If the driver does not enter the location information and the vehicle is in motion, the ELD must record a missing required data element data diagnostic event for the driver.

## DATA DIAGNOSTIC EVENTS CONT.

Requirement #	Event Code	Event Name	Description
4.6.1.7	4	Data Transfer Data Diagnostic Event	If the monitoring mechanism fails to confirm proper in-service operation of the data transfer mechanism(s), an ELD must record a data transfer data diagnostic event and enter an unconfirmed data transfer mode.
4.6.1.6	5	Unidentified Driver Data Diagnostic Event	(b) The ELD must provide a mechanism for the driver to review and either acknowledge the assignment of one or more of the unidentified driver records attributable to the driver under the authenticated driver's profile as described in paragraph 4.3.2.8.2(b)(1) of this appendix or indicate that these records are not attributable to the driver. (c) If more than 30 minutes of driving in a 24-hour period show unidentified driver on the ELD, the ELD must detect and record an unidentified driving records data diagnostic event and the data diagnostic indicator must be turned on for all drivers logged in to that ELD for the current 24-hour period and the following 7 days.



Drive**ELD**



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